

ABSTRACT OF THE DISCLOSURE

The process comprises the steps of forming, on top of a semiconductor material wafer, a holed mask having a lattice structure and comprising a plurality of openings each having a substantially square shape and a side with an inclination of 45° with respect to the flat of the wafer; carrying out an anisotropic etch in TMAH of the wafer, using said holed mask, thus forming a cavity, the cross section of which has the shape of an upside-down isosceles trapezium; and carrying out a chemical vapor deposition using TEOS, thus forming a TEOS layer which completely closes the openings of the holed mask and defines a diaphragm overlying the cavity and on which a suspended integrated structure can subsequently be manufactured.

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